

# Datacolor® Spectro 1000 Family

Reference-Grade, Precise Color Measurement



Datacolor Spectro 1000 series is a family of close-tolerance benchtop spectrophotometers designed for high efficiency and confidence in color formulation and quality control.

**Datacolor Spectro 1000**

Standard true close-tolerance color measurement instrument

**Datacolor Spectro 1000V**

Ideal for measuring unusual sample size or type, as well as operations requiring high throughput

**Datacolor Spectro 1000X**

Aperture upward facing instrument, ideal for liquid, paste, powder and granular samples

**Datacolor Spectro 1050**

Flexible measurement in either reflectance or transmittance mode



Ideal for industries that require a spectrophotometer for the highest level of consistency across the supply chain including: retail brands, textile mills, and manufacturers of plastics, paint and coatings, flooring, furniture, cosmetics and more.

## Be confident in your measurement performance

- Ensure uniform assessment across different locations and throughout the supply chain with high inter-instrument agreement
  - Increase operational confidence with sample temperature measurements
  - Positioning Camera and LCD ensure proper sample placement every time
- 

## Get more done with high efficiency and reliability

- Increase productivity with fast measurement speed and response times
- Improve efficiency with seamless backward compatibility to Datacolor benchtop instruments
- Boost operational confidence with the included 5-year warranty\*



## Be prepared for the future





- Internet-connected capabilities will enable remote services and access to data analytics
- 





***"The DC1000 is a game changer; no more guessing if a user measured a specimen that had properly cooled to ambient temperature."***

Dave Ertle | Advanced R&D Engineer/Solution Center Manager-Black Belt at GEON® Performance Solutions, a global leader in the formulation, development and manufacture of performance polymer solutions.

---

Feature overview for Datacolor Spectro 1000 / 1000V / 1000X / 1050 :

	 Datacolor Spectro 1000	 Datacolor Spectro 1000V	 Datacolor Spectro 1000X	 Datacolor Spectro 1050
<b>Part Number</b>	1030-1641	1030-1642	1030-1653	1030-1644
<b>Instrument Type</b>	Dual beam d/8° spectrophotometer			
<b>Illumination Source</b>	Pulsed xenon filtered to approximate D65			
<b>Sphere Diameter</b>	152mm/6in			
<b>Wavelength Range</b>	360 nm -700 nm			
<b>Reporting interval</b>	10 nm			
<b>Photometric range</b>	0-200%			
<b>Spectral Analyzer</b>	SPX Analyzer			
<b>20 read repeatability on white tile using double flash (CIELAB) *</b>	0.01 (max)			
<b>Inter-instrument agreement: reflectance measurements (CIELAB)*</b>	0.08 (avg) 0.15 (max)			
<b>Sample Temperature</b>	LAV aperture			
<b>IR Sensor Accuracy</b>	±0.9°F/ ±0.5°C			
<b>Lens</b>	4 position auto-zoom			
<b>Aperture Plates</b>	3 standard: LAV (30mm illuminated, 26mm measured) SAV (9mm illuminated, 5 mm measured) USAV (6.6 mm illuminated, 2.5 mm measured) 2 optional: MAV (20 mm illuminated, 16 mm measured) XUSAV (3.0 mm illuminated, 2.5 mm measured)			
<b>Aperture detection</b>	Yes			
<b>Automated, adjustable UV calibration</b>	Yes			
<b>UV cutoff filters</b>	400 nm 420 nm 460 nm			
<b>Remote Measurement Button</b>	Yes			
<b>Sample Positioning Camera</b>	Yes			

				
	<b>Datacolor Spectro 1000</b>	<b>Datacolor Spectro 1000V</b>	<b>Datacolor Spectro 1000X</b>	<b>Datacolor Spectro 1050</b>
<b>Transmittance</b>	No	No	No	Yes
<b>Inter-instrument agreement – regular transmittance at 550 nm</b>	No	No	No	±0.20% at 85% T ±0.10% at 32% T
<b>Inter-Instrument agreement -transmission haze measurements</b>	No	No	No	±0.15% at 10% TH
<b>Transmission sampling aperture size</b>	No	No	No	22 mm
<b>Operating Environment</b>	Temperature: 5°C to 40°C, Max Relative Humidity 20%-85% non-condensing. Recommended Relative Humidity 50% +/- 15% non-condensing			
<b>Vertical Mount</b>	No	Yes	Yes	No
*Environmental Conditions: Temperature 23°C +/- 1°C RH 44% +/- 1%				

Physical Specifications	Description			
<b>Color Display</b>	3.5 inch RGB LCD			
<b>Display Resolution</b>	320x240 pixel resolution			
<b>Weight</b>	44.0 lbs (20 kg)	54.5 lbs (24.7 kg)	50-52 lbs (23 kg)	44.0 lbs (20 kg)
<b>Dimensions</b>	Size: L 16.4" (41.66 cm) front to back, L 18.3" (46.48 cm) sample arm to back, H 15.3" x W 12.3" (38.86 cm x 31.24 cm)	Height: 25.0" (63.5 cm) Width: 12.2" (39.9 cm) Depth : 16.3 (41.4 cm)	Height: 18.7" (47.6 cm) Width: 12.2" (39.9 cm) Depth: 16.3" (41.1 cm)	Size: L 16.4" (41.66 cm) front to back, L 18.3" (46.48 cm) sample arm to back, H 15.3" x W 12.3" (38.86 cm x 31.24 cm)

For more information on the Datacolor Spectro 1000 family, please visit [www.datacolor.com/Spectro-1000](http://www.datacolor.com/Spectro-1000)